



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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June 27, 2002

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor *DRH*

FROM: James D. Smith, Senior Reclamation Specialist *JDS*

RE: 2001 Fourth Quarter Water Monitoring, Energy West Mining Company, Deer Creek Mine, C/015/018-WQ01-4

1. Were data submitted for all of the MRP required sites? YES [] NO [X]

Identify sites not monitored and reason why, if known:

79-23, 79-24, 79-40, 80-43, and 80-46 were dry;
80-44, 82-51, and 89-66 had <0.5 gpm flow in October;
DCR01: December, frozen;
MCH01: December, frozen;
RCLF1: dry or no access all quarter;
RCF2: dry all quarter;
MFA1: dry all quarter;
MFB2: dry all quarter;

Flow at HCC01 is measured daily by Utah Power and reported by PacifiCorp in the Annual Report.

Monthly MRP analyses at the two UPDES points did not include baseline parameters. (Oil and grease is reported in the DMRs rather than as an operational parameter, and analysis for oil and grease is done only if there is a visible sheen on the water.)

2. On what date does the MRP require a five-year resampling of baseline water data.

See Technical Directive 004 for baseline resampling requirements. Consider the five-year baseline resubmittal when responding to question one above. Indicate if the MRP does not have such a requirement.

Resampling Due Date

Renewal submittal due 10/07/00, renewal due 2/07/01. Baseline analyses were performed in 1996 and 2001 and will be repeated every 5 years, i.e., next baseline analyses will be in 2006.

3. Were all required parameters reported for each site? YES [] NO [X]

Comments, including identity of monitoring site:

Nitrate was reported as nitrate + nitrite during EDI;

DCWR1: Boron and Selenium were not reported.

Monthly operational analyses at the two UPDES points did not include baseline parameters. (Oil and grease is reported in the DMRs rather than as an operational parameter, and analysis for oil and grease is done only if there is a visible sheen on the water.)

4. Were irregularities found in the data? YES [X] NO []

Comments, including identity of monitoring site:

MAIN N MAIN E: sulfate (n = 34) and total hardness (n = 43) were outside the two standard deviation range;

79-2: field specific conductivity (n = 20) was outside the two standard deviation range;

79-10: field specific conductivity (n = 32) was outside the two standard deviation range;

79-15: field specific conductivity (n = 20) was outside the two standard deviation range;

79-26: field specific conductivity (n = 14) was outside the two standard deviation range;

79-28: Na (n = 8) was outside the two standard deviation range;

79-34: ortho-phosphate (n = 1, 2 non-detects) was detected above the MDL; lab specific conductivity (not a required parameter, n = 13) was outside the two standard deviation range;

79-35: field specific conductivity (n = 28) was outside the two standard deviation range;

79-38: field specific conductivity (n = 27) was outside the two standard deviation range;

80-41: ortho-phosphate (n = 1, 1 non-detect) was detected above the MDL, lab specific conductivity (not a required parameter, n = 13) was outside the two standard deviation range;

80-50: ortho-phosphate (n = 1, 2 non-detects) was detected above the MDL;

89-65: field specific conductivity (n = 14) was outside the two standard deviation range;

89-67: field specific conductivity (n = 19) was outside the two standard deviation range;

Burnt Tree: field specific conductivity (n = 29) was outside the two standard deviation range;

HCC02: Na (n = 18) was outside the two standard deviation range;

HCC04: Cl (n = 70), Na (n = 18), and lab specific conductivity (not a required parameter, n = 72) were outside the two standard deviation range;

RFC3: sulfate (n = 36) was outside (high) the two standard deviation range;

5. Were DMR forms submitted for all required sites?

Identify sites and months not monitored:

1 st month,	YES [X]	NO []
2 nd month,	YES [X]	NO []
3 rd month,	YES [X]	NO []

6. Were all required DMR parameters reported?

YES [X] NO []

Comments, including identity of monitoring site:

7. Were irregularities found in the DMR data?

YES [X] NO []

Comments, including identity of monitoring site:

UT0023604-001 – November: DMR average (n = 106) and DMR max (n = 106) flows were far above the reported maximum in the APPX database and outside two standard deviation range, and far above values reported for October and December: there was probably a data-entry error;

UT0023604-001 – November: DMR total iron – 30 day average (n = 27) was outside two standard deviation range;

8. Based on your review, what further actions, if any, do you recommend?

Specific conductivity meter might need calibration.

Check UT0023604-001 November DMR Average and Maximum Flow entries into database for data-entry errors.

DMR TDS Quarter Average, a parameter required for UT0023604-002, needs to be added to the APPX database.

Numerous values were outside the two standard deviation range. Sample size is usually small, and none of the values are extreme. Recommended action is to watch for trends.

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